

**Region 6 Compliance Assurance and Enforcement Division  
INSPECTION REPORT**

Inspection Date(s):	4/14-16/2015		
Media:	Air		
Regulatory Program(s)	RMP		
Company Name:	Air Liquide Large Industries US LP		
Facility Name:	Air Liquide Large Industries US LP-LaPorte ASU & SMR		
Facility Physical Location:	11450 W Fairmont Pkwy		
(city, state, zip code)	LaPorte, TX 77571		
Mailing address:	2700 Post Oak Blvd		
(city, state, zip code)	Houston, TX 77056		
County/Parish:	Harris County		
Facility Contact:	Abraham Mathew	Plant Manager	
	abraham.mathew@airliquide.com		
FRS Number:	1000 00220174		
Identification/Permit Number:	RMP 1000 0022 0174		
Media Number:	4820101956		
NAICS:	325120		
SIC:	2813		
Personnel participating in inspection:			
Dominique Duplechain	EPA	Inspector	214-665-7484
Sherronda Phelps	EPA	Inspector	281-983-2122
Abraham Mathew	Air Liquide	Plant Manager	281-896-5555
Pete Coleman	Air Liquide	PSM Specialist	713-624-8726
Joshua Nguyen	Air Liquide	Compliance and Reliability	713-624-8277
Steven Derkits	Air Liquide	Production Manager	281-889-4830
EPA Lead Inspector	<i>Dominique Duplechain</i>		<i>8-19-2015</i>
Signature/Date	Dominique Duplechain		Date
Supervisor	<i>Samuel Tates</i>		<i>8/19/2015</i>
Signature/Date	Samuel Tates		Date

## **Section I - INTRODUCTION**

On April 14, 2015, I (Dominique Duplechain) arrived at Air Liquide Large Industries LaPorte ASU & SMR in LaPorte, TX for an announced Clean Air Act (CAA) inspection. I met with Mr. Abraham Mathew, Plant Manager. I presented my credentials to Mr. Mathew and informed him that this was an EPA inspection to determine compliance with the CAA Section 112(r)(1) and 112(r)(7). The scope of the inspection was a partial compliance evaluation (PCE) and included evaluation of the compliance of the facility with 40 CFR Subpart 68 – Chemical Accident Prevention Provisions. EPA Inspector, Sherronda Phelps, participated in the inspection on April 15-16<sup>th</sup>. An employee representative was invited to participate in the inspection. The site does not have union representation.

## **FACILITY DESCRIPTION**

LaPorte ASU & SMR produces hydrogen from natural gas using steam methane reforming technology. Air Liquide identified the steam methane reformer (SMR) as a covered process. The air separation unit (ASU) does not have any regulated substances above a threshold quantity. The facility employs approximately 13 full time employees.

## **Section II – OBSERVATIONS**

### **40 CFR Part 68- Chemical Accident Prevention Provisions**

#### **Subpart A-General**

##### **§68.12 General Requirements**

Air Liquide submitted a single Risk Management Plan (RMP) with a covered process that is subject to Program 3 requirements. The first submission was submitted on March 21, 2013. The regulated flammable substances that are above the threshold quantities identified in §68.130 are: methane and hydrogen in a flammable mixture. Air Liquide provided documentation that showed the maximum system charge for the anhydrous ammonia in the ASU was below the threshold quantity of 10,000 lbs. As a facility with a Program 3 process, Air Liquide must develop and implement a management system, conduct a hazard assessment, implement the prevention requirements of §68.65 through §68.87, develop and implement an emergency response program, and submit the data elements from §68.175 in their RMP.

##### **§68.15 Management**

I reviewed the LaPorte SMR operation chart which did not assign specific sections of the RMP to individual by name or title as required §68.15. The chart provided identified that the facility would use various shared service departments for the implementation of RMP; however, further details on the personnel assigned to a specific element was not delineated. See Appendix 3.

#### **Subpart B- Hazard Assessment**

##### **§68.20 Applicability**

Air Liquide is a Program 3 stationary source subject to this part and is required to prepare a worst case release scenario analysis and complete the five year accident history.

##### **§68.22 Offsite consequence analysis parameters**

I reviewed the Offsite Consequence Analysis report dated May 1, 2013, conducted by Geosyntec. I reviewed the facility's RMP Comp scenario summary dated February 2013. In the analyses of the worst case and alternate scenarios Air Liquide utilized the parameters identified in the rule.

**§68.25 Worst-case release scenario analysis.**

For its flammable worst case scenario, Air Liquide used the release of the entire volume of their largest flammable containing vessel in calculation of their worst case scenario.

**§68.28 Alternative release scenario analysis.**

Air Liquide identified and analyzed at least one alternative release scenario for all regulated flammable substance held in a covered process that is more likely to occur than the worst case scenario. Air Liquide documented additional scenarios considered with associated distance to endpoints as required by §68.28(b)(2). Air Liquide used the parameters defined in §68.22 to determine distance to the end point.

**§68.30 Defining offsite impacts—population.**

Air Liquide provided documentation that indicated that population was estimated within a circle with its center at the point of the release and a radius determined by the distance to endpoint. Population was estimated using the Landview 6 population estimator. Landview 6 software uses 2000 Census data. It appears Air Liquide did not use the most recent Census data to estimate the population potentially affected in its offsite consequence analysis as required by §68.30(c); however, no residences were within the distance to endpoint. See Appendix CBI.

**§68.33 Defining offsite impacts—environment.**

Distance to endpoint did not reach beyond the Air Liquide's fence line which includes other properties operated under different Air Liquide business groups.

**68.36 Review and update.**

The first RMP submission was dated March 21, 2013.

**68.39 Documentation.**

Air Liquide provided maps depicting the point of the release and a radius of distance to endpoint for the worst case and alternate release scenarios. Air Liquide provided Landview 6 population data and RMP Comp data dated February 1, 2013.

**§68.42 Five year accident history**

In the RMP submittal, Air Liquide indicated there were no accidental releases of a RMP covered substance held above a threshold quantity in a covered process that resulted in death, injury, or significant property damage onsite, or known offsite death, injury, evacuation, shelter in place, property damage, or environmental damage.

**Subpart D-Program 3 Prevention Program**

**§68.65 Process Safety information**

I reviewed the following process safety information: information pertaining to the hazards of substances in the processes, maximum intended inventory, the equipment in the process, P&IDs, and process descriptions of the RMP processes.

**§68.67 Process Hazard Analysis**

Initial PHA: The initial PHA was conducted in August 2008 for Air Liquide's Gulf Coast SMR Units prior to construction of the LaPorte SMR. The study was performed using HAZOP methodology. The initial PHA included the HAZOP worksheets which identified the hazards of the process using guidewords. The 2008 PHA worksheets under the columns of "S" and "P" provide a numerical digit which indicate that some

type of risk ranking scheme was utilized as a qualitative evaluation; however, no risk ranking chart was included in the report to enable the reader to determine what the columns and numbers indicate. Consequences included worst case consequences such as explosion assuming no safeguards. The initial PHA did not include operator input as it was conducted preconstruction; however, personnel from Air Liquide's Operations and Engineering departments participated in the study. The PHA did not identify individual team members by name or provide an indication of expertise for each participant. The 2008 PHA did not include a qualitative facility siting checklist or reference a detailed quantitative facility siting study. Additionally, human factors was not addressed in the initial PHA. Air Liquide did not complete a human factors checklist or address the requirement as a specific deviation in each node of the PHA. It appears that Air Liquide did not address facility siting or human factors within the 2008 PHA as required by §68.67(c)(5) and (c)(6).

Note: Air Liquide later contracted Baker Risk to perform a siting study in September 2011 prior to unit startup.

PHA updates: Air Liquide performed an additional updates to the original PHA in October 2009 and November 2012. The 2009 update was performed to address auxiliary equipment which was not addressed in the initial PHA. The PHA report included a list of team members and titles but no description of expertise brought to the study was included in the report. Air Liquide included a PHA Risk Matrix which provides an outline of the risk scheme for a qualitative evaluation. The risk ranking scheme evaluated severity and likelihood of each deviation at each node. The 2012 PHA update was performed to address issues after startup.

2013 Revalidation: The 5 year revalidation was conducted June 25-17, 2013, with the report dated September 20, 2013. It appears that the 2013 revalidation was conducted after the five year due date as required by §68.67(f). The PHA report included a list of team members and titles but no description of expertise brought to the study was included in the report. I reviewed training documentation for the PHA leader to ensure he received training in HAZOP methodology. A description of his qualifications for leading PHAs was not included in the report. The 2013 revalidation included a facility siting and human factors checklists. The 2013 PHA revalidation did not include external factors that have the potential to impact the process. The RMP submittal indicated that natural events were also considered hazards of the process; however, the initial PHA and revalidation did not address common occurring natural phenomena such as hurricanes or floods as required by §68.67(c)(1). See Appendix CBI.

I reviewed each node item noted as an unacceptable risk to verify that a safeguard was documented to mitigate the hazard. Air Liquide identified the following in Table 1 as an unacceptable risk; however, no safeguard was noted. If a PHA recommendation was documented it did not reference the installation of an engineering control. Item 18.1 noted an administrative control as the safeguard, however, no additional risk assessment (ie. LOPA) was performed. It is unknown at this time if the safeguard applied in 18.1 is sufficient to mitigate the risk to an acceptable rating. It appears that Air Liquide did not mitigate all unacceptable risks during its hazard evaluation as required by §68.67 and §68.67(c)(3). See Appendix CBI.

Table 1: PHA item number with no safeguards noted for unacceptable risk

PHA Item No.	Severity/Likelihood rating	Safeguard Noted
10.9	3-3	None
14.13	3-3	None
16.14	3-3	None

18.1	3-3	SOP
19.3	3-3	None
19.4	3-3	None

Air Liquide provided PHA action item written schedule which identified due dates for open items. Open items from the 2013 revalidation are in regards to facility siting. Target dates for closed items were not noted on the written schedule. Closed items were noted as resolved with a date of resolution; however, the specific action taken was not documented as required by §68.67(e). See Appendix CBI.

#### §68.69 Operating Procedures

Ms. Phelps and I reviewed operating procedures from the SMR. At the time of the inspection, Air Liquide had procedures in place for the operating phases identified within the rule with the exceptions of temporary and emergency operations as required by §68.69(a)(1)(iii) and (a)(1)(v). Air Liquide indicated that temporary and emergency operations are covered under the management of change. Reviewed procedures included safety and health considerations. Reviewed procedures did not provide any caution statements or warnings within the body of the steps. Air Liquide did not list operating limits or consequences of deviation and steps required to correct or avoid deviation or reference the Air Liquide's Operation and Deviation Matrix within each procedure as required by §68.69(a)(2). Reviewed emergency shutdown procedures did not include the conditions under which an emergency shutdown is required nor the assignment of shutdown responsibility for each step as required by §68.69(a)(1)(iv). Appendix CBI.

Air Liquide provided 2013 annual operating procedure certifications for the SMR. The 2014 annual procedure certification did not certify that all procedures were current and accurate as required by §68.69(c). Appendix CBI.

Reviewed procedures were dated with effective dates of 2013 or later which was after unit startup. It appears that Air Liquide did not develop and implement written operating procedures upon unit startup as required by §68.69(a). Table 2 includes a list of procedures and effective dates.

Table 2: Operating Procedure Effective Dates

Procedure	Effective Date
Emergency Shutdown	8/2014
Reformer Hot Startup	11/2013
B Hydrogen Compressor Startup	11/2013
A Hydrogen Compressor Startup	11/2013
Reformer Trip Checklist	6/2014
A Hydrogen Compressor Emergency Shutdown	11/2013
Confined Space Entry	4/2015
Energy Isolation and Control	4/2015
Hot Work	8/2014
Process (Line) Break	2/2013
PSA System Emergency Shutdown	11/2013
PSA System Normal Startup	8/2013
PSA System Normal Shutdown	9/2013

I reviewed the following safe work procedures: Energy Isolation and Control, Confined Space Permit, Line Break, and Hot Work. It is unknown at this time if a procedure exists to control the entrance and egress of employees who are non-operators and are not working on the process as required by §68.69(d). Reviewed safe work procedures were noted with effective dates after start up. None of the reviewed safe work procedures were specific to the site. Section 3.6 of the hot work procedure, "Completing and Issuing permit", did not fully address the permitting process as described by Mr. Steven Derkitz, Production Manager, and as evidenced in the reviewed permits as required by §68.69(d). Based on the documents provided, the permitting process starts with the issuance of a general safe work permit. An addendum is required for hot work which addresses the requirements found in OSHA 29 CFR 1910.252(a). Additionally, a job pre-planning hazard worksheet is required to be completed. These steps are not identified in the procedure. See Appendix CBI.

#### §68.71 Training

Ms. Phelps initiated the review of training records for four operators while onsite. Air Liquide provided additional documentation for offsite review. Based on the documentation provided, operators did not receive initial training in the operating procedures specified in §68.69. As noted above, I reviewed written procedures that were developed after the startup. Operator procedure training was conducted in March 2015. The documentation included a few course titles that were received before January 2012. The course titles were identified as the following: Smith system training assessment, training and qualification viewer, smart doc viewers, and Lives classroom training. It is unknown at this time the content covered as part of these courses.

The training records provided did not include training on safety and health hazards of the process, nor did the reviewed records include training in Line Break safe work practice (opening process equipment) as required by §68.71(a). I reviewed the Training Matrix which identified mandatory courses based on job role. The matrix did not include any safe work training requirements with the exception of confined space. See Appendix CBI.

#### §68.73 Mechanical Integrity

We met with the Maintenance Coordinator to discuss the mechanical integrity program. Inspections of fixed equipment and Instrumentation & Electrical was requested. Due to the age of the facility, many inspections were not yet required. Air Liquide provided the Mechanical Integrity Policy for PSM and General (Non-Covered) Systems. The policy identified inspection frequency and associated standards for fixed equipment; however, no standard or recognized and generally accepted good engineering practice for controls (monitoring devices, sensors, alarms, interlocks) and emergency shutdown systems were noted in the policy (ie. IEC 61506, IEC 61511, ANSI/ISA 58401). While onsite, I was informed that Air Liquide's Elements Important to Safety (EIS) can be either Distributed Control System (DCS) or Safety Instrumented System (SIS). I requested an example of an EIS test, as well as, Air Liquide's inspection procedures for instrumentation and electrical. In response to my request, Air Liquide provided a work order and computer printout for a functional loop test which did not document the name of the person who performed the test or the results obtained from the test as required by §68.73(d)(4). Inspection procedures provided were more electrical in nature. Based on the procedures provided by Air Liquide, it appears that Air Liquide did not develop written procedures for the inspection and testing of instrumented systems which includes DCS, SIS, and ESD as required by §68.73(b) and (d)(2).

#### §68.75 Management of Change (MOC)

I reviewed Air Liquide's Management of Change procedure and MOCs 1999-ISS, 2016-ISS, and 3554-ISS.

**§68.77 Pre-startup review (PSSR)**

I reviewed two PSSRs while onsite, MOC-7039-ISS and MOC-7004-ISS.

**§68.79 Compliance audits**

Ms. Phelps reviewed the June 2012 compliance audit provided by Air Liquide. After reviewing the documentation provided, Air Liquide is conducting the audit based on the elements of the PSM. There was no reference of the Risk Management Program and the elements in which the facility is subject. The audit included at least one person knowledgeable in the process. It appears that Air Liquide did not certify that compliance was evaluated with Program 3 requirements 2012 compliance audit as required by §68.79(a). Ms. Phelps and I reviewed findings made from the audit and the timeliness in addressing the findings. See Appendix CBI.

**§68.81 Incident Investigation**

I reviewed OSHA 300 logs and a list of incidents which involved an accidental release or employee injury. It appeared that Air Liquide did not have incidents from December 2012 to the time of inspection that would have required an incident investigation as required by the rule.

**§68.83 Employee Participation**

I reviewed the employee participation policy. Air Liquide's employee participation plan address employee participation for each Program 3 element.

**§68.85 Hot work permit**

I requested examples of permits to review offsite. The hot work procedure does not contain clear instructions for completing the permit. Section 3.6 of the hot work procedure, "Completing and Issuing permit", did not fully address the permitting process as described by Mr. Steven Derkitz, Production Manager, and as evidenced in the reviewed permits as required by §68.69(d). Based on the documents provided, the permitting process starts with the issuance of a general safe work permit. An addendum is required for hot work which addresses the requirements found in OSHA 29 CFR 1910.252(a). Additionally, a job pre-planning hazard worksheet is required to be completed. These steps are not identified in the procedure.

**§68.87 Contractors**

Air Liquide provided contractor safety information for Mistras which included OSHA 300 logs, Mistras Code of Conduct, and Experience Modification Factor documentation. The information provided documented Air Liquide's evaluation of Mistras safety performance. The documentation did not indicate that Air Liquide reviewed Mistras safety programs in its evaluation as required by §68.87(b). Although requested, Air Liquide could not provide periodic evaluations of the performance of the contractor required by §68.87(b)(5) which includes requirements for contract employee training documentation. See Appendix CBI.

**Subpart E-Emergency Response**

**§68.90 Applicability**

According to Mr. Mathew, the facility employees does not respond to accidental releases, therefore, the facility is not required to comply with §68.95. Air Liquide coordinated response actions with the fire department and mechanisms are in place to notify emergency responders when there is a need for a response.

### **Subpart G-Risk Management Plan**

#### **§68.150 Submission**

Air Liquide first RMP submission was dated March 21, 2013. The SMR started up in January 2012. Air Liquide did not submit its RMP on the date which a regulated substance is above threshold quantity as required by §68.150(b)(3).

### **Subpart H-Other Requirements**

#### **§68.215 Permit content and air permitting authority**

I reviewed Air Liquide's Title V operating permit, O3460, dated April 18, 2012. The permit contained a statement listing 40 CFR Part 68 as applicable. The permit outlined the requirements for submitting a compliance schedule for meeting the requirements of 40 CFR Part 68 or compliance certification as required by 40 CFR Part 70.6(c)(5) when the facility is in compliance with all requirements of 40 CFR Part 68.

## **Section III – AREAS OF CONCERN**

**40 CFR 68.15:** The LaPorte SMR operation chart which did not assign specific sections of the RMP to individual by name or title as required §68.15.

**40 CFR 68.30(c):** Air Liquide did not use the most recent Census data to estimate the population potentially affected in its offsite consequence analysis; however, no residences were within the distance to endpoint.

**40 CFR 68.67(a) and 68.67(c)(3):** Air Liquide did not mitigate all unacceptable risks during its hazard evaluation. See Table 1.

**40 CFR 68.67(c)(1):** The RMP submittal indicated that natural events were also considered hazards of the process; however, the initial PHA and revalidation did not address commonly occurring natural phenomena such as hurricanes or floods.

**40 CFR 68.67(e):** I reviewed the 2013 PHA revalidation action tracking written schedule. Target dates for closed items were not noted on the written schedule. Closed items were noted as resolved with a date of resolution; however, the specific action taken was not documented.

**40 CFR 68.67(f):** The 2013 PHA revalidation was conducted after the five year due date of August 2012. The revalidation was performed in June 2013.

**40 CFR 68.69(a):** Reviewed procedures were dated with effective dates of 2013 or later which was after unit startup. Air Liquide did not develop and implement written operating procedures upon unit startup.

**40 CFR 68.69(a)(1)(iii) and (a)(1)(v):** Air Liquide did not have written procedures in place for the following operating phases identified within the rule: temporary operations and emergency operations.

**40 CFR 68.69(a)(1)(iv):** Reviewed emergency shutdown procedures did not include the conditions under which an emergency shutdown is required nor the assignment of shutdown responsibility for each step.



**40 CFR 68.69(a)(2):** Air Liquide did not list operating limits, consequences of deviation, and steps required to correct or avoid deviation nor was a reference to the Air Liquide's Operation and Deviation Matrix addressed within each procedure.

**40 CFR 68.69(c):** The 2014 annual procedure certification did not certify that all procedures were current and accurate.

**40 CFR 68.69(d):** Safe work practice procedures (confined space, hot work, and line break) were developed and implemented at least two years after the startup of the process. It is unknown at this time if a procedure exists to control the entrance and egress of employees who are non-operators and are not working on the process as required by §68.69(d).

The hot work procedure did not provide clear instructions for the permitting process. Section 3.6 of the hot work procedure, Completing and Issuing permit, did not fully address the permitting process as described by facility personnel and evidenced in the reviewed permits.

**40 CFR 68.71(a):** Based on the documentation provided, operators did not receive initial training in the operating procedures as specified in §68.69. I reviewed written procedures that were developed after the startup. Operator procedure training was conducted in March 2015. The training records provided did not include training on safety and health hazards of the process, nor did the reviewed records include training in Line Break safe work practice.

Note: The documentation included a few course titles that were received before January 2012. The course titles were identified as the following: Smith system training assessment, training and qualification viewer, smart doc viewers, and Lives classroom training. It is unknown at this time the content covered as part of these courses.

**40 CFR 68.73(b) and (d)(2):** Based on the mechanical integrity procedures provided, Air Liquide did not develop written procedures for the inspection and testing of instrumented systems which includes DCS, SIS, and ESD.

**40 CFR 68.73(d)(4):** Air Liquide provided the computer printout for a functional loop test which did not document the name of the person who performed the test or the results obtained from the test.

**40 CFR 68.79(a):** Air Liquide did not certify that compliance was evaluated with Program 3 requirements in the 2012 compliance audit report.

**40 CFR 68.87(b):** The information reviewed documented Air Liquide's evaluation of Mistras safety performance. The documentation did not indicate that Air Liquide reviewed Mistras safety programs in its evaluation.

**40 CFR 68.87(b)(5):** Although requested, Air Liquide could not provide periodic evaluations of the contractor's performance in fulfilling its obligations identified in 68.87(c) which includes requirements for contract employee training documentation.

**40 CFR 68.150(b)(3):** Air Liquide first RMP submission was dated March 21, 2013. The SMR started up in January 2012. Air Liquide did not submit its RMP on the date which a regulated substance is above threshold quantity.

#### **Section IV – FOLLOW UP**

**N/A**

#### **Section V – LIST OF APPENDICES**

Appendix 1–Sign-in sheet

Appendix 2 – EPA Document Request

Appendix 3 – Organization Chart

#### **Appendix CBI (not included in published version of the report)**

- A. Compliance Audits
  - 1. 2012 Compliance Audit
  - 2. 2012 Audit Action Tracking
- B. Contractor
  - 1. Mistras EMR Letter
  - 2. Mistras Safety Performance Email
  - 3. Mistras OSHA 300-2010-2012
  - 4. Mistras Policy Statement
- C. Hot Work
  - 1. Hot Work Procedure
  - 2. Permit 130656
  - 3. Permit 213677
  - 4. Permit 213802
- D. Mechanical Integrity
  - 1. Mechanical Integrity Policy
  - 2. Instrumentation and Electrical Inspection Procedures
  - 3. EIS Test Example
- E. Offsite Consequence Analysis
- F. Operating Procedures
- G. Process Hazard Analysis
  - 1. 2008 Initial PHA
  - 2. 2008 Action Items
  - 3. 2013 Revalidation
  - 4. 2013 Action Items
- H. Training
  - 1. Employee Training Records
  - 2. Training Matrix

## Appendix 1

### Sign In Sheet

# Air Liquide Large Industries - LA Porte SMR

4/13-4/

SIGN IN

PETE Coleman SR. PROCESS SAFETY MGMT Specialist 713-624-8726

ABRAHAM MATHEW PLANT MANAGER 281-896-5355

Steven Derkits Production Manager 281-889-4830

Catherine Karnas ALLEX Program Participant

Joshua Nguyen Compliance & Reliability 713-624-8277

## Appendix 2

### EPA Document Request



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVE  
DALLAS, TX 75202

Document Request-Air Liquide Large Industries U.S.-LaPorte SMR  
EPA Inspection April 13-15, 2015

RMP element	Documents
Management System	1. Organization chart or similar document that assigns responsibility to the requirements of Program 3
Offsite Consequence Analysis	2. Modeling and Maps for Worst case and Alternative release scenarios for flammables
Process Safety Information	3. Laporte SMR General Operation/Deviation Matrix 4. Process Block Flow Diagram 5. Maximum Intended Inventory
Process Hazard Analysis	6. PHAs-2008 Initial PHA, 2010 SMR Auxillary Units, SMR Rework, 2013 Revalidation 7. Documentation that PHA recommendations have been addressed or scheduled 8. Facility Siting Study-2011 9. Facility siting recommendation tracking sheet
Operating Procedures	10. Operating Procedures- LaPorte SMR Emergency Shutdown, PSA System Emergency Shutdown, Hydrogen Compressor Emergency Shutdown 11. An example procedure for each phase of operation identified in 68.69 12. Operating Procedure Certifications-2012-2014 13. Line Break Permit Procedure 14. Energy Control Procedure 15. Confined Space Procedure
Training	16. SMR Level 3 Training Matrix 17. Training Records- for Operator A, Operator B, Operator C, Operator D (from date of hire to present)
Mechanical Integrity	18. Inspection procedures for Instrumentation and electrical (I&E) 19. List of overdue inspections/tests- Fixed, Rotating, and I&E (identify the piece of equipment for which the inspection is overdue and the date that it should have been completed) 20. Example of an EIS test 21. Mechanical Integrity Policy for PSM 22. LaPorte Process Safety Management Handbook
Management of Change	23. MOC procedure 24. MOC- 2016-ISS, 1999-ISS, 3554-ISS
Compliance Audits	25. Last compliance audit



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVE  
DALLAS, TX 75202

	26. Documentation that deficiencies, if any, have been corrected
Employee Participation	27. Employee Participation Plan
Hot Work Permits	28. Safe Work Permit-#130656, #213677, #213802 (include attachments) 29. Hot Work Procedure
Contractors	30. Documentation that a review of Mistras' safety performance and programs was conducted prior to work being performed onsite 31. Example of a periodic performance evaluation as required by 68.87(b)(5) for Mistras
Other	32. Central Data Exchange (CDX) RMP Submittal 33. Title V Permit 34. Documentation that shows that the ASU is below the threshold quantity for anhydrous ammonia.

## Appendix 3

### Organization Chart



Air Liquide  
Shared  
Services

HSE

Technical  
Training

Supply Chain  
Management

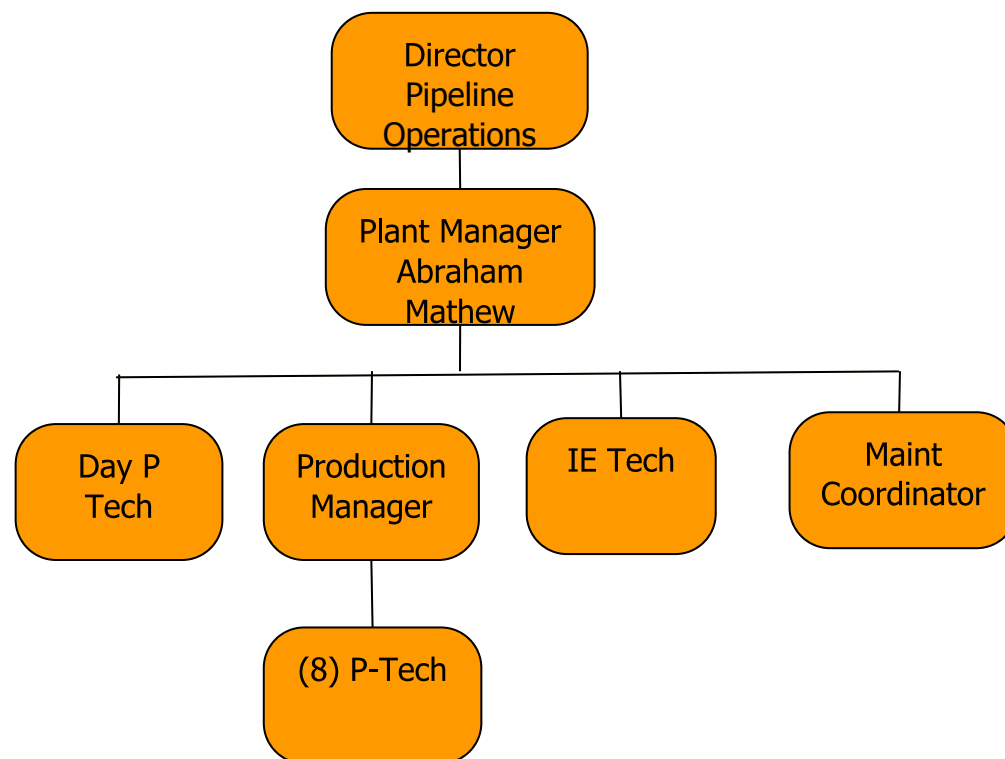
Risk  
Management

Engineering

Reliability  
Center

Process Safety  
Management

## La Porte SMR Operations Structure



The Facility RMP is supported in implementation and development by various departments and subject matter experts.